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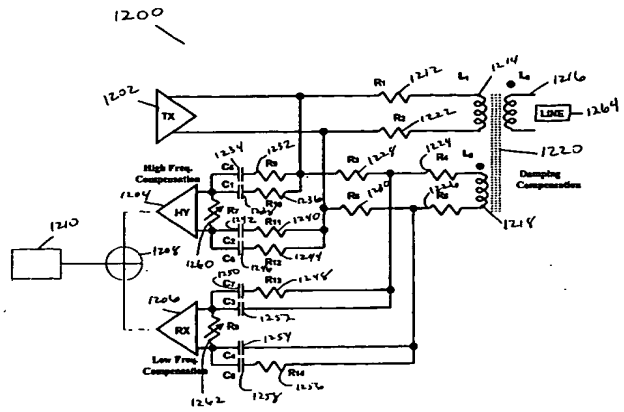
(54) Title: METHOD AND SYSTEM FOR PROVIDING AN ANALOG FRONT END FOR MULTILINE TRANSMISSION IN COMMUNICATION SYSTEMS



(57) Abstract: A method and system for providing an analog front end for multiline transmission in communications systems are described. A transceiver circuit (1100) is configured to reduce line noise by providing a coupled transmitter (1106), receiver (1106), prebalance circuit (1110), and transformer (1220) further coupled to a communication line (1264) external to the transceiver circuit. A hybrid (HY) input stage (1204) coupled to the prebalance circuit provides high frequency compensation by including a first high pass circuit coupled to the HY stage inputs, wherein the high pass circuit includes two parallel passes, each with a capacitor (C1,C5) in series with a resistor (R9,R10). A receiver input stage (RX) (RX) (1206) further coupled to the prebalance circuit provides low frequency compensation by including a second high pass circuit coupled to the RX stage inputs, wherein the high pass circuit includes two parallel passes, one with a capacitor (C3) and one with a capacitor (C7) in series with a resistor (R13). Lastly, a summing junction (1208) coupled to the HY stage (1204) and RX stage (1206) subtracts the HY stage output from the RX stage output providing a filtered incoming analog signal for post processing.

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